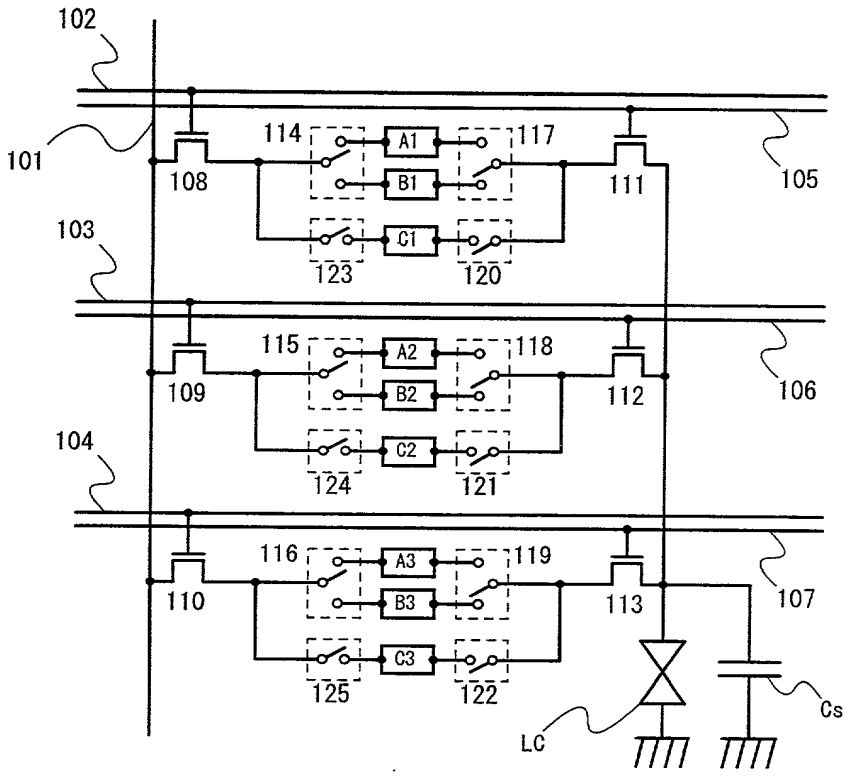

102
101
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
A1
B1
C1
A2
B2
C2
A3
B3
C3
LC
Cs

FIG. 1

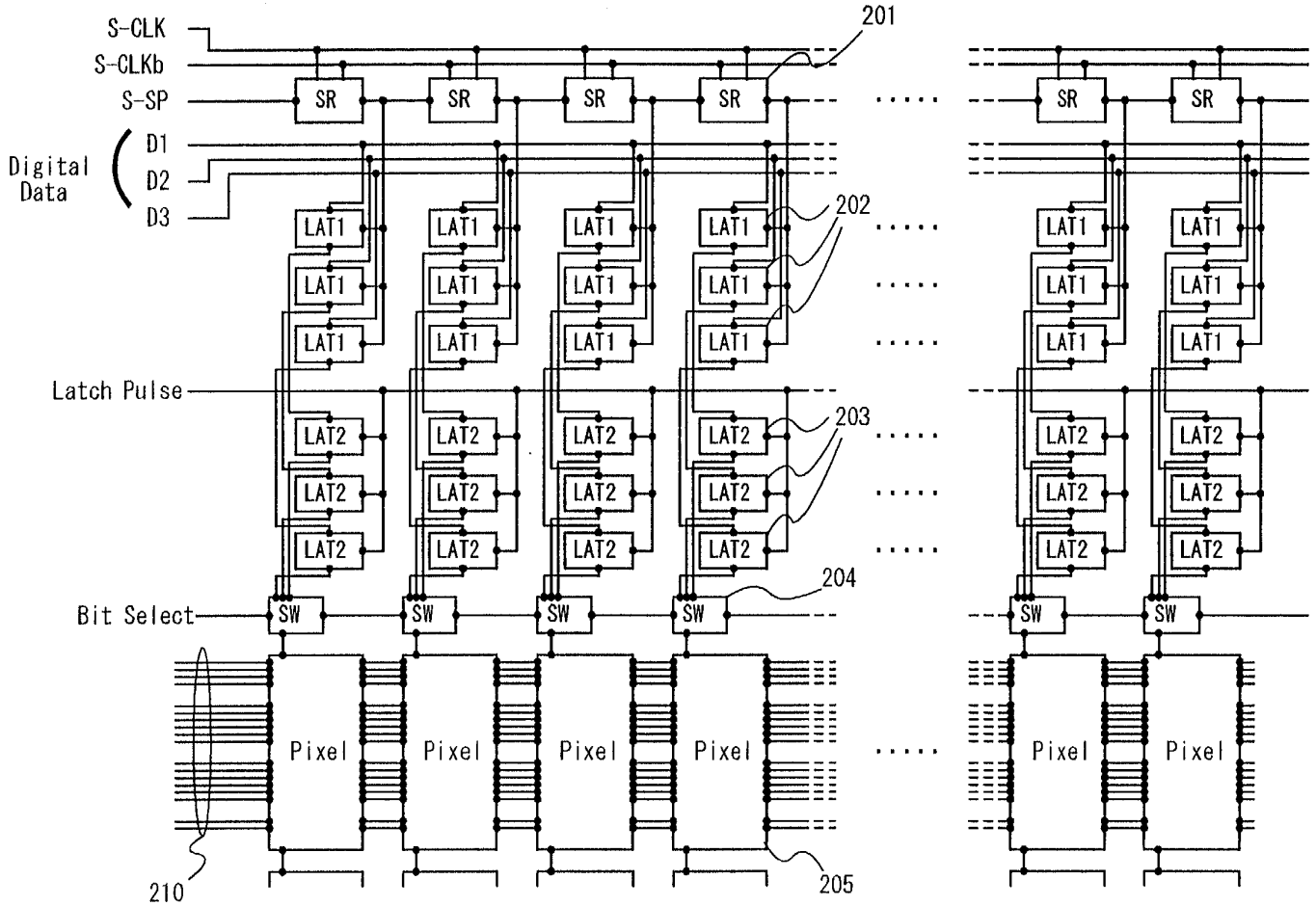

S-CLK
S-CLKb
S-SP
Digital Data
D1
D2
D3
Latch Pulse
Bit Select
SR
LAT1
LAT2
SW
Pixel
201
202
203
204
205
210

FIG. 2

FIG. 3A

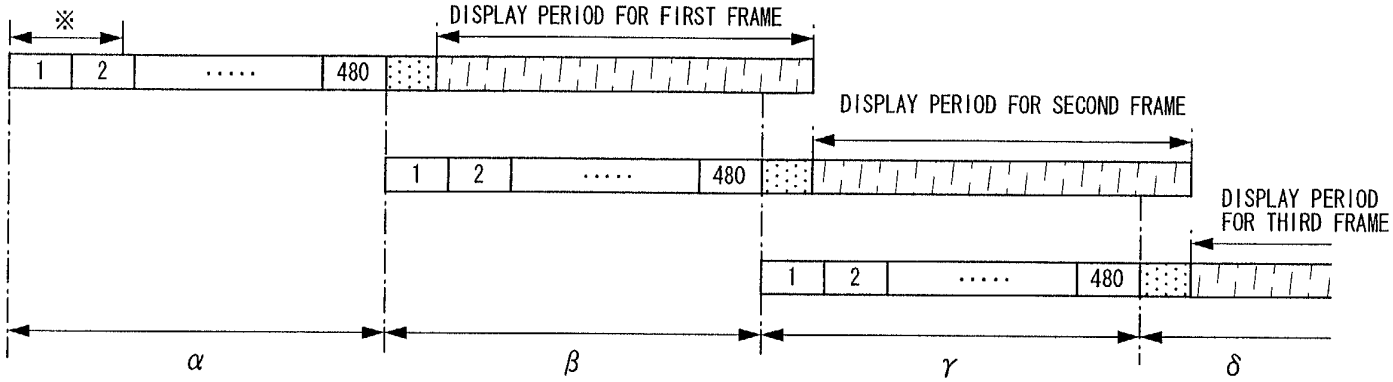


FIG. 3B

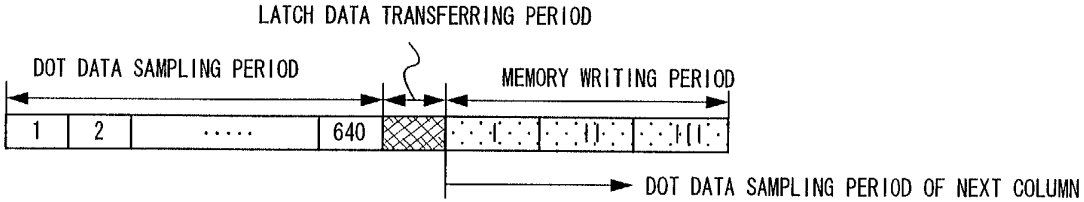
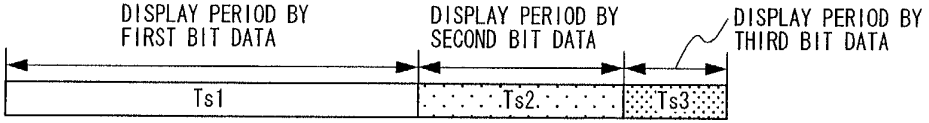


FIG. 3C



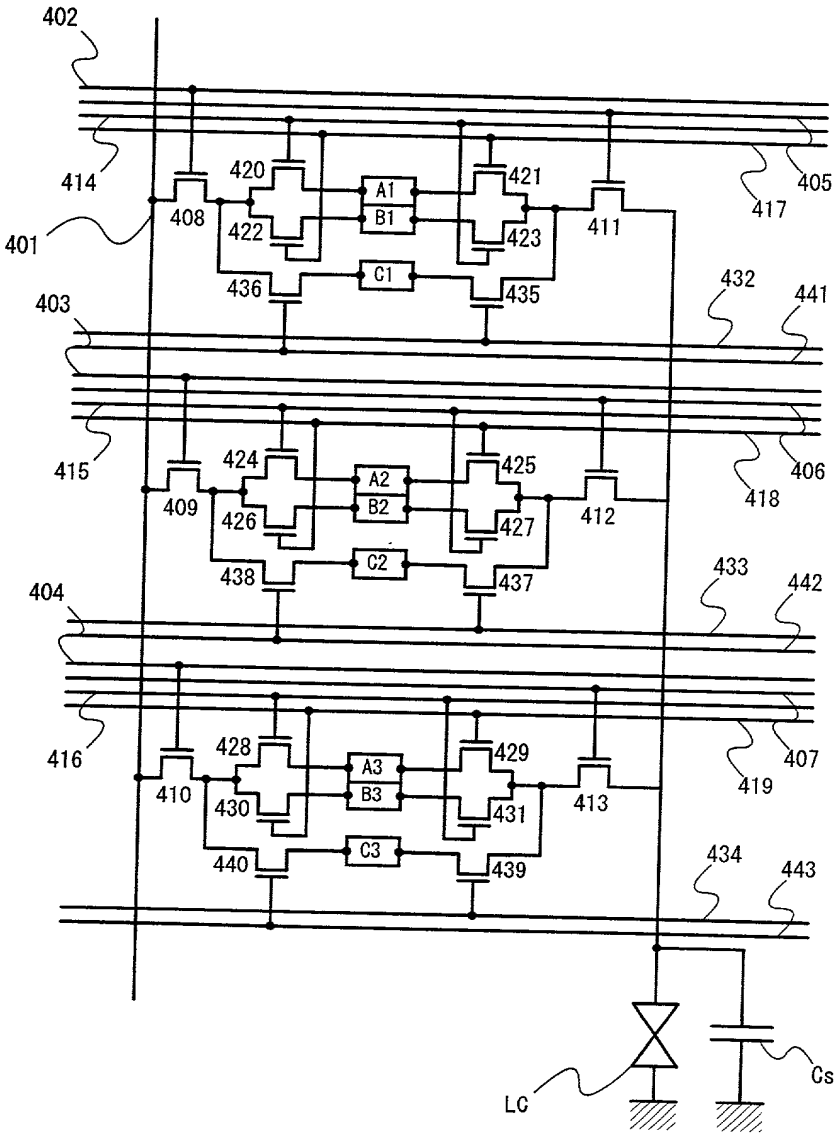

402
414
420
A1
421
405
417
408
B1
401
422
423
411
C1
436
435
432
441
403
415
424
425
406
418
409
A2
426
B2
427
412
C2
438
437
433
442
404
416
428
429
407
419
410
A3
430
B3
431
413
440
C3
439
434
443
LC
Cs

FIG. 4

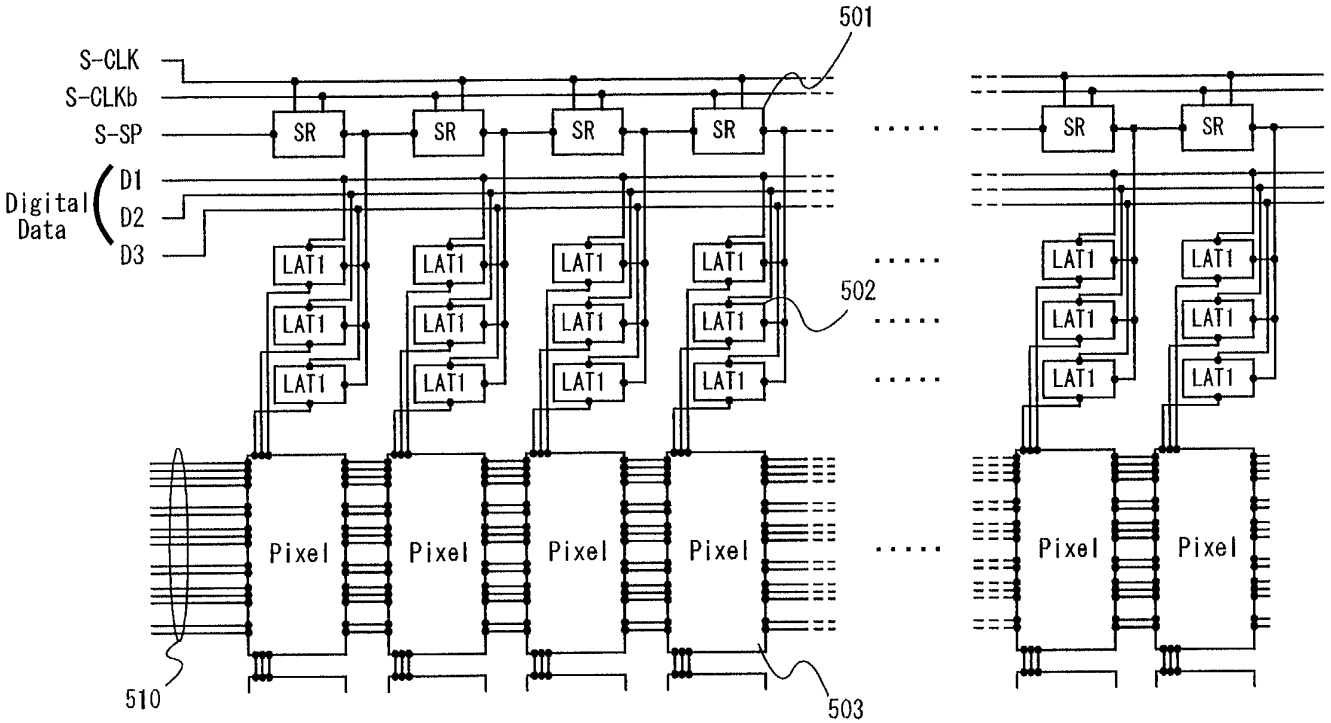

501
S-CLK
S-CLKb
S-SP
Digital Data
D1
D2
D3
SR
LAT1
502
Pixel
510
503

FIG. 5

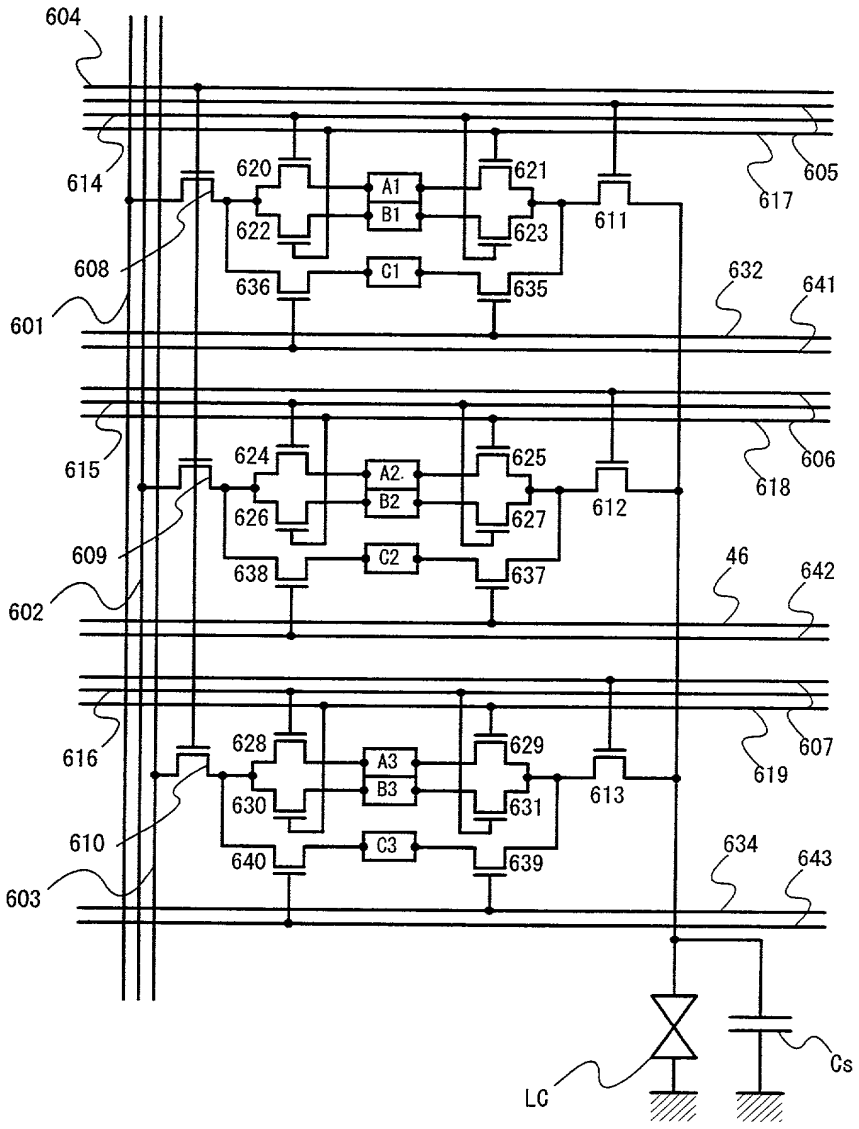

604
614
620
621
605
617
A1
B1
622
623
611
608
C1
636
635
632
641
601
615
624
625
606
618
A2
B2
626
627
612
609
C2
638
637
46
642
602
616
628
629
607
619
A3
B3
630
631
613
610
C3
640
639
634
643
603
LC
Cs

FIG. 6

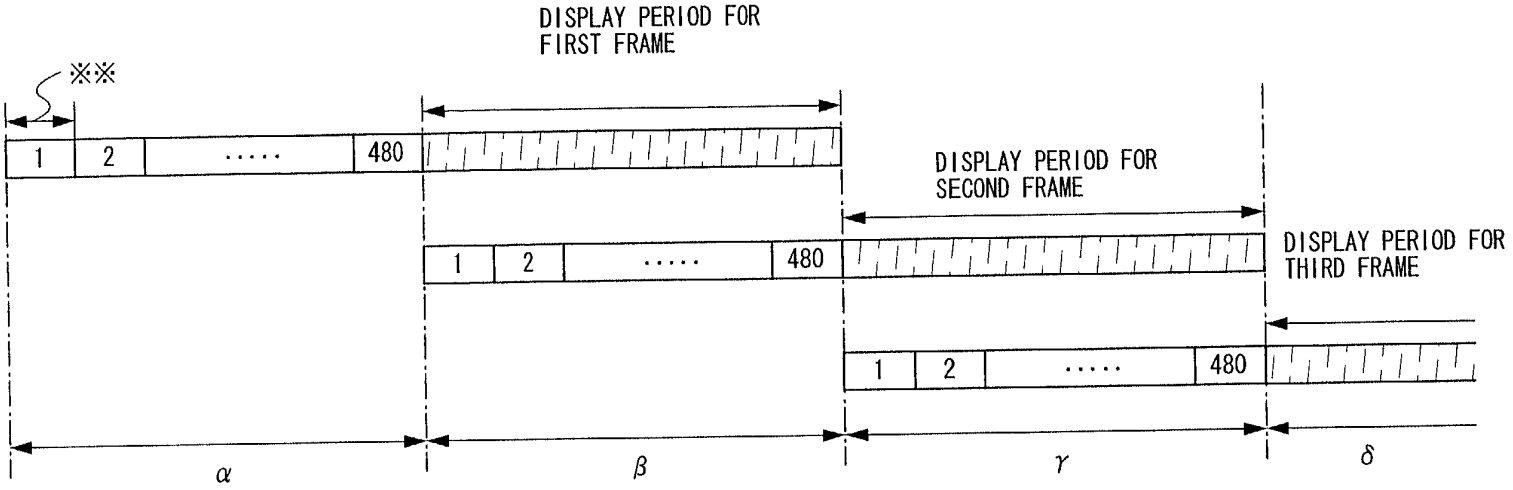


FIG. 7A

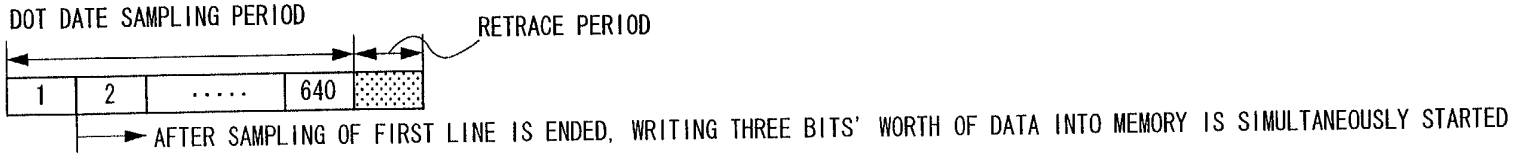


FIG. 7B

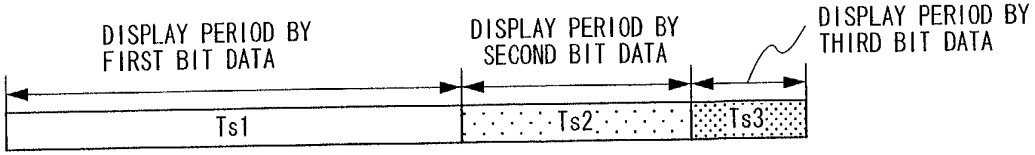


FIG. 7C

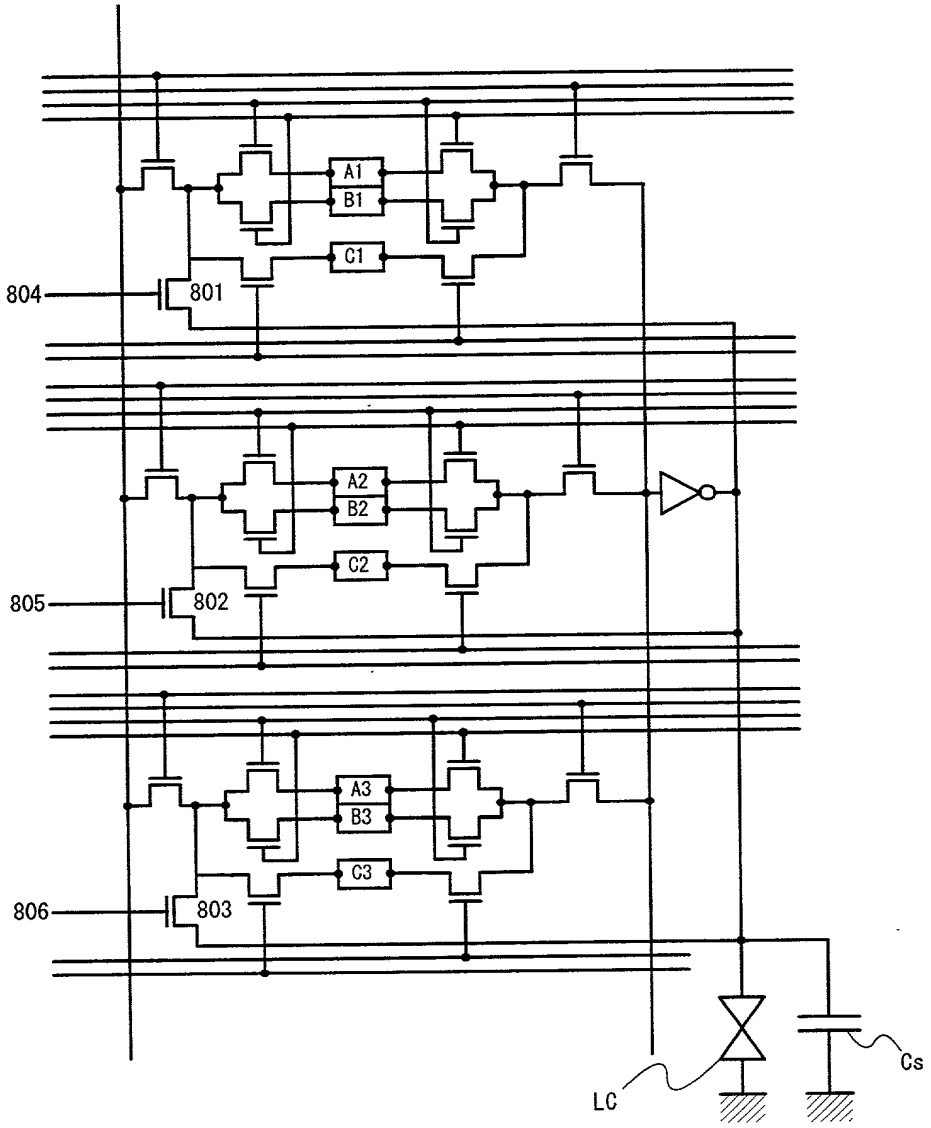


FIG. 8

FIG. 9A

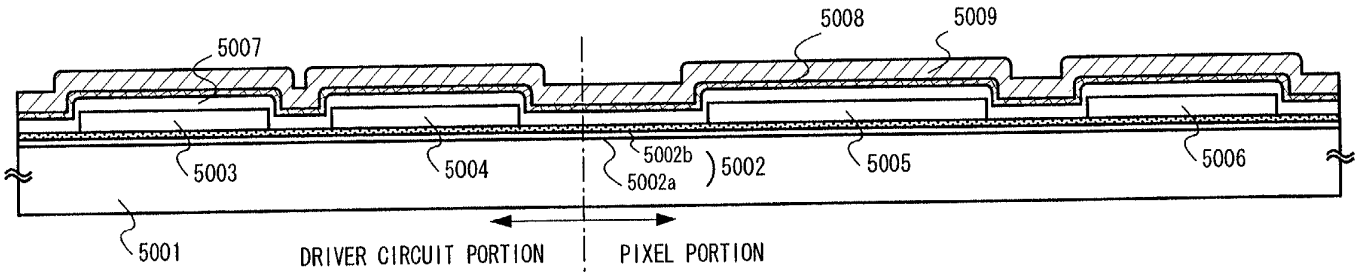


FIG. 9B

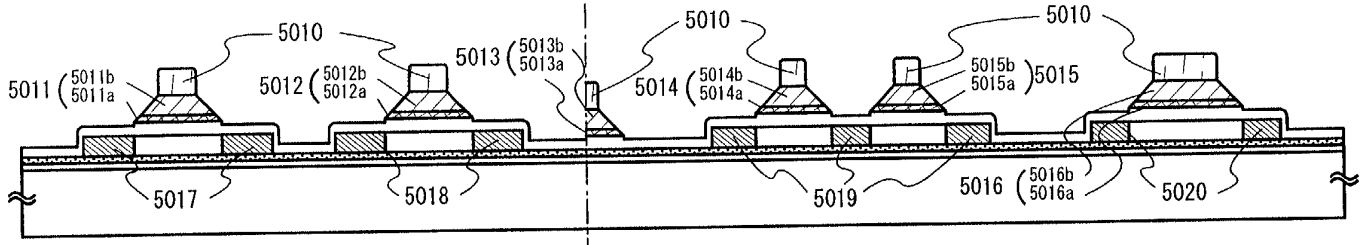


FIG. 9C

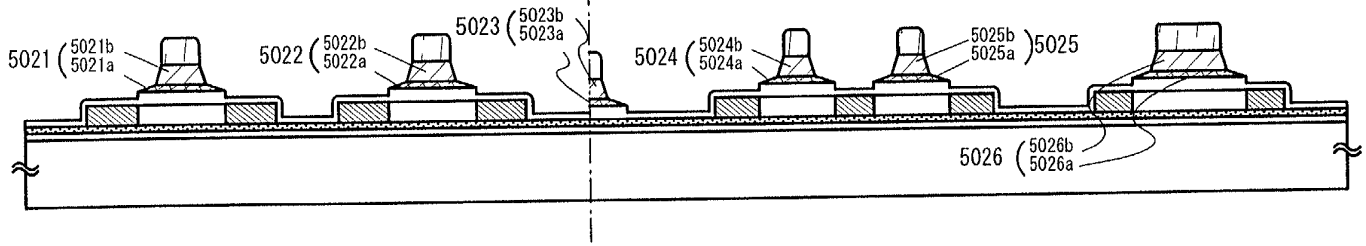


FIG. 10A

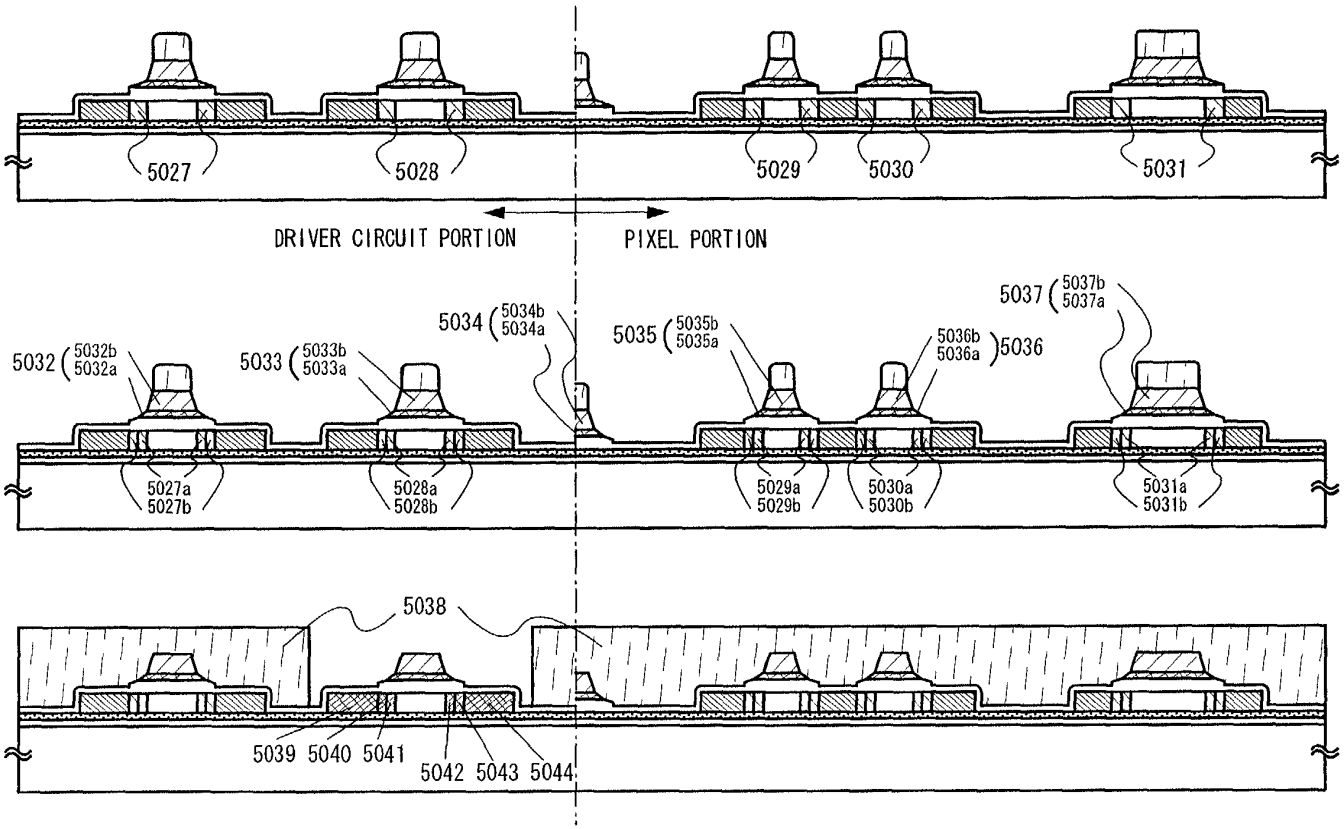


FIG. 10B

FIG. 10C

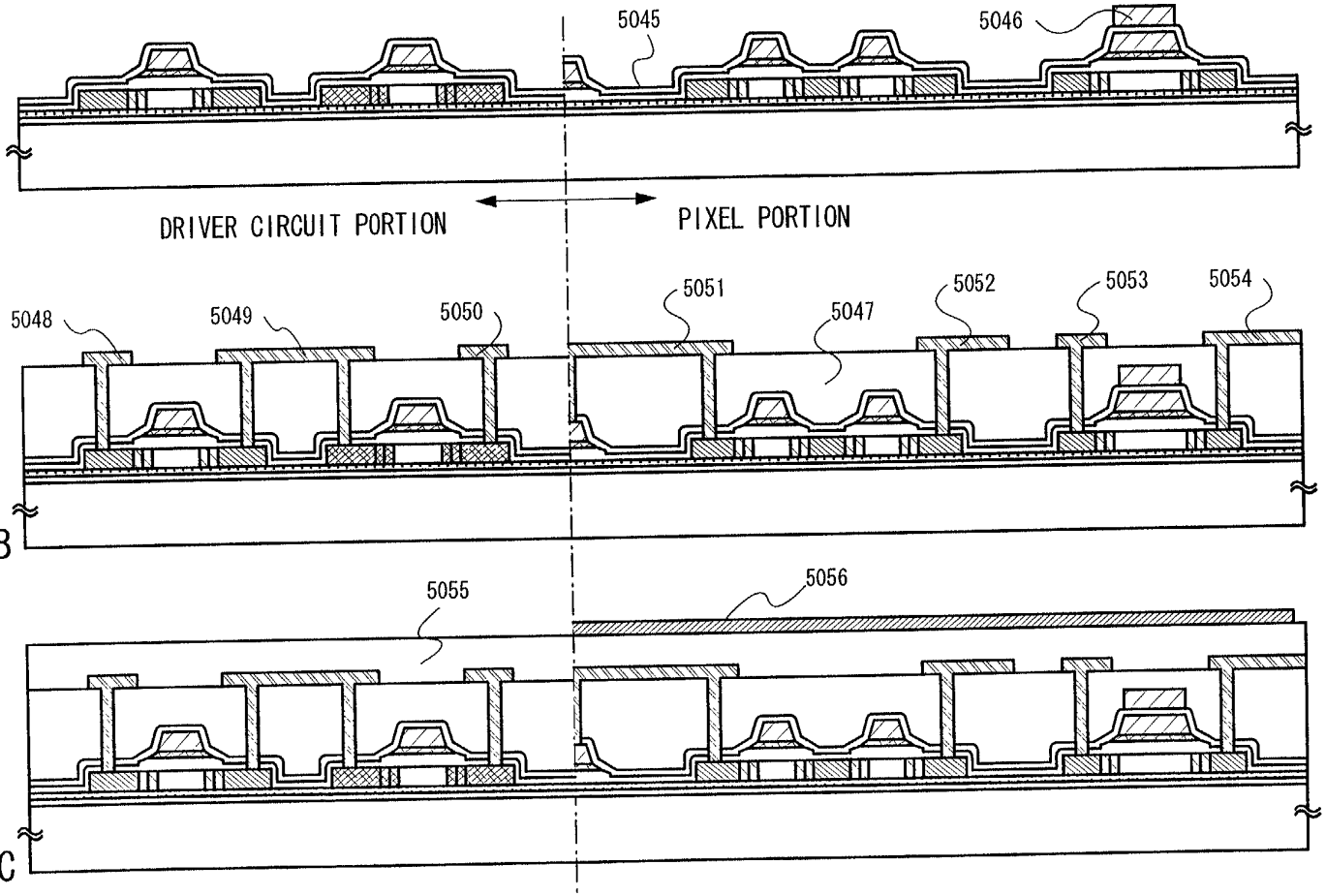


FIG. 11A

FIG. 11B

FIG. 11C

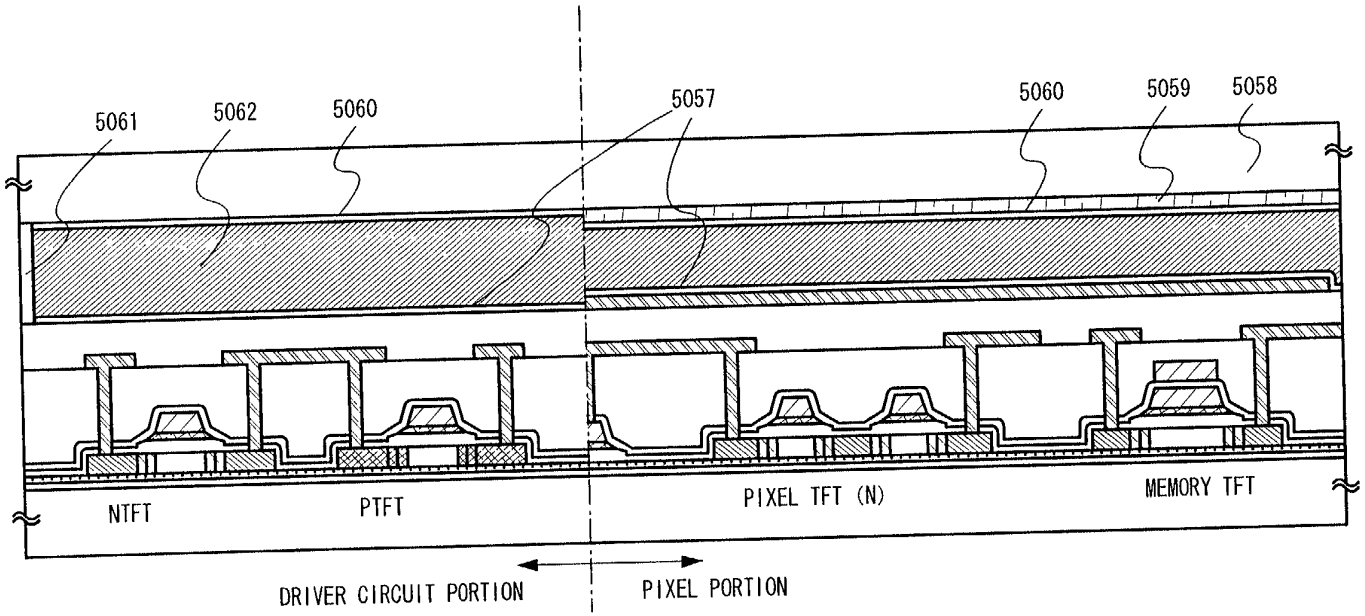

5061
5062
5060
5057
5060
5059
5058
NTFT
PTFT
PIXEL TFT (N)
MEMORY TFT
DRIVER CIRCUIT PORTION
PIXEL PORTION

FIG. 12

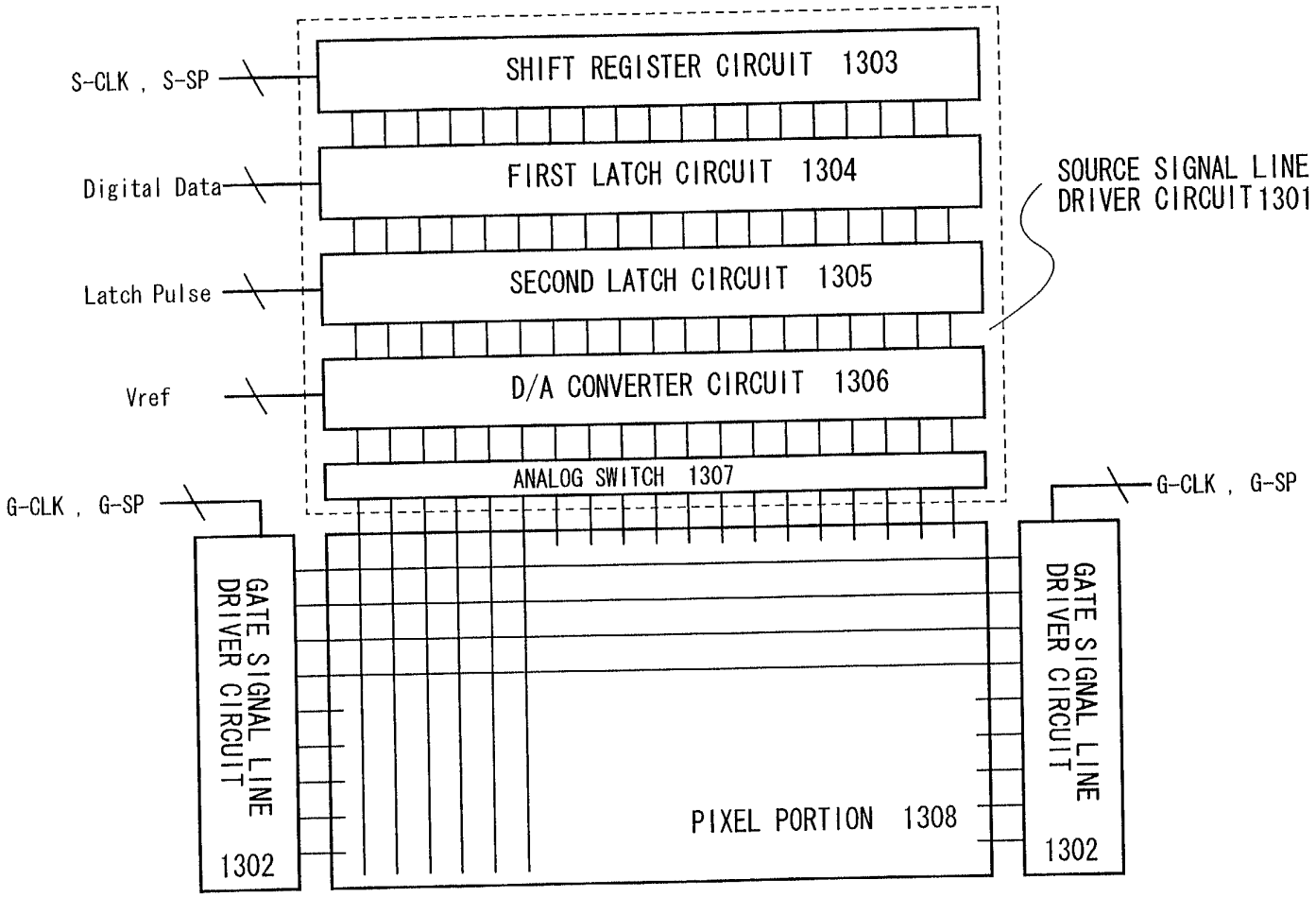

S-CLK , S-SP
Digital Data
Latch Pulse
Vref
G-CLK , G-SP
SHIFT REGISTER CIRCUIT 1303
FIRST LATCH CIRCUIT 1304
SECOND LATCH CIRCUIT 1305
D/A CONVERTER CIRCUIT 1306
ANALOG SWITCH 1307
SOURCE SIGNAL LINE DRIVER CIRCUIT 1301
G-CLK , G-SP
GATE SIGNAL LINE DRIVER CIRCUIT 1302
PIXEL PORTION 1308
GATE SIGNAL LINE DRIVER CIRCUIT 1302

FIG. 13

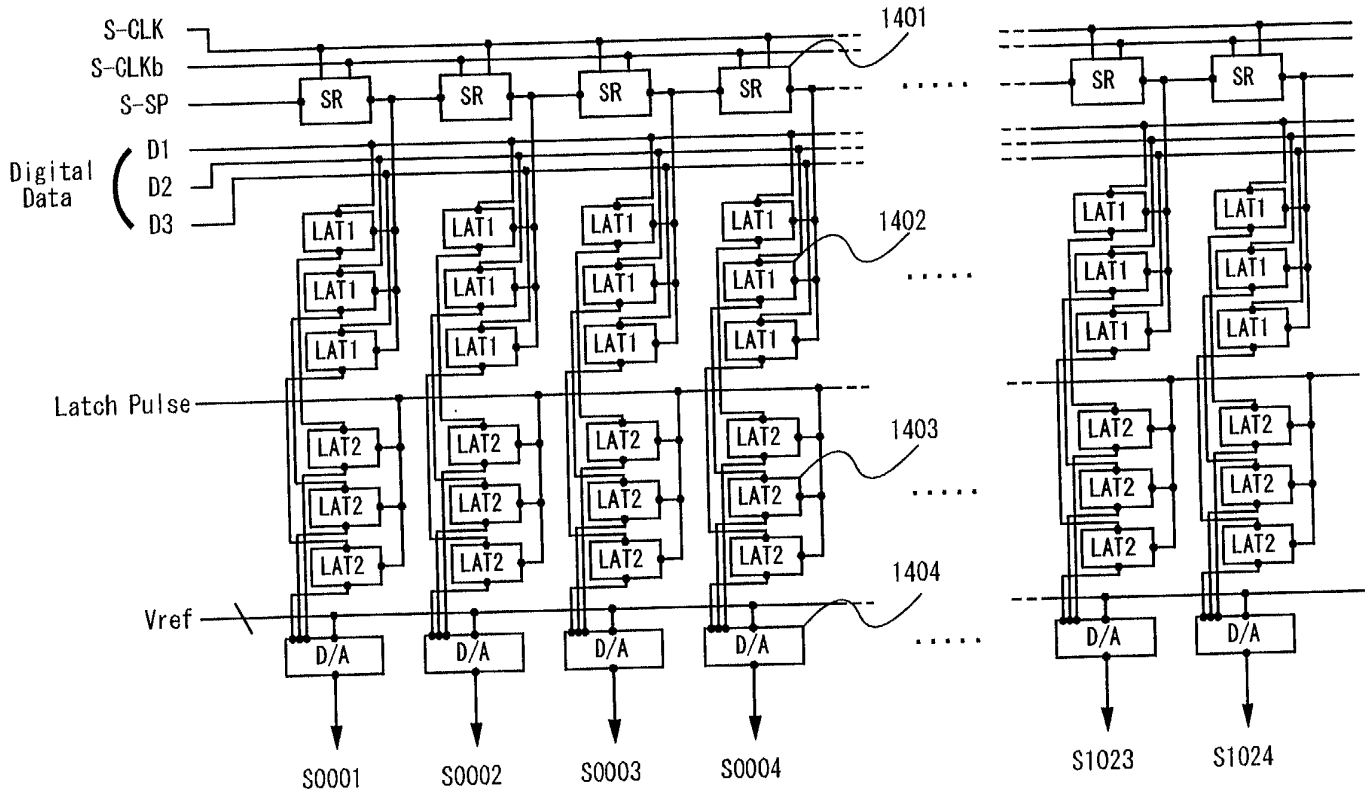

S-CLK
S-CLKb
S-SP
Digital Data
D1
D2
D3
Latch Pulse
Vref
SR
LAT1
LAT2
D/A
1401
1402
1403
1404
S0001
S0002
S0003
S0004
S1023
S1024

FIG. 14

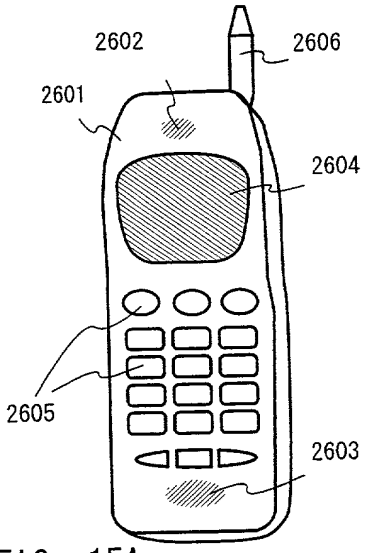


FIG. 15A

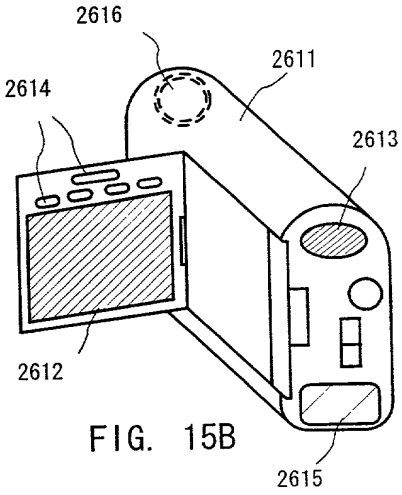


FIG. 15B

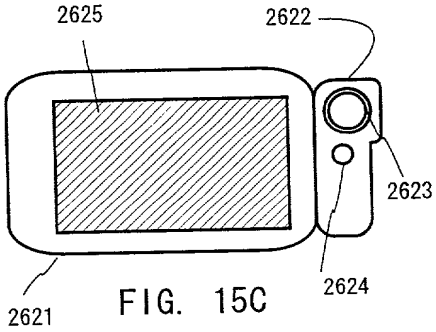


FIG. 15C

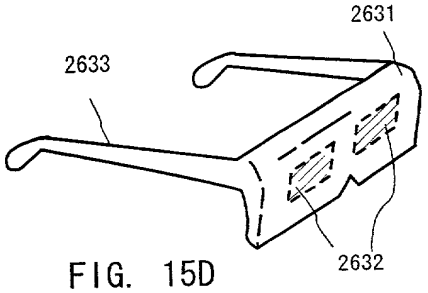


FIG. 15D

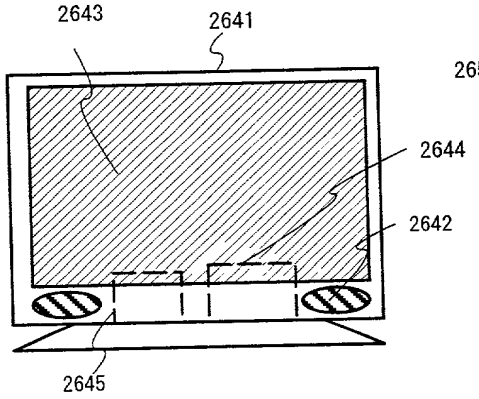


FIG. 15E

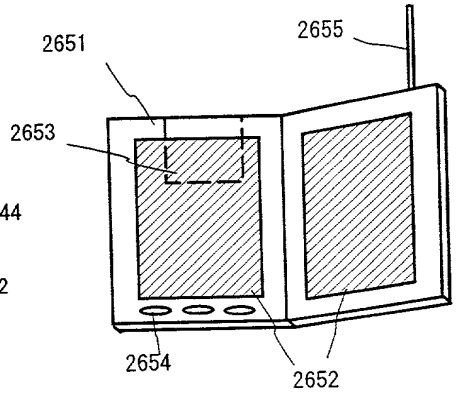


FIG. 15F

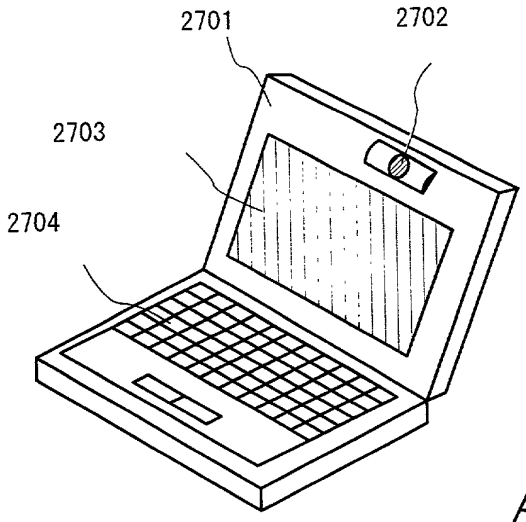


FIG. 16A

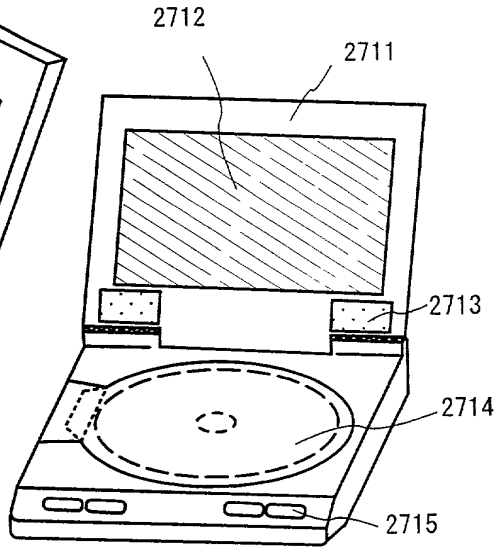


FIG. 16B

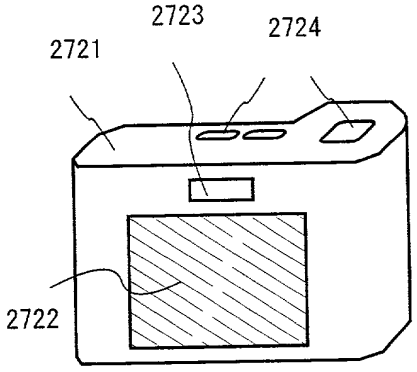


FIG. 16C

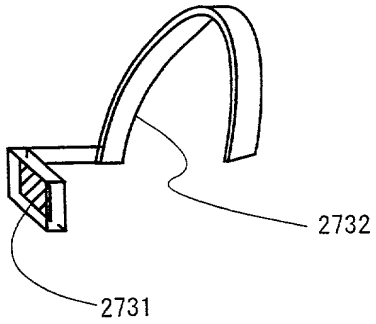


FIG. 16D

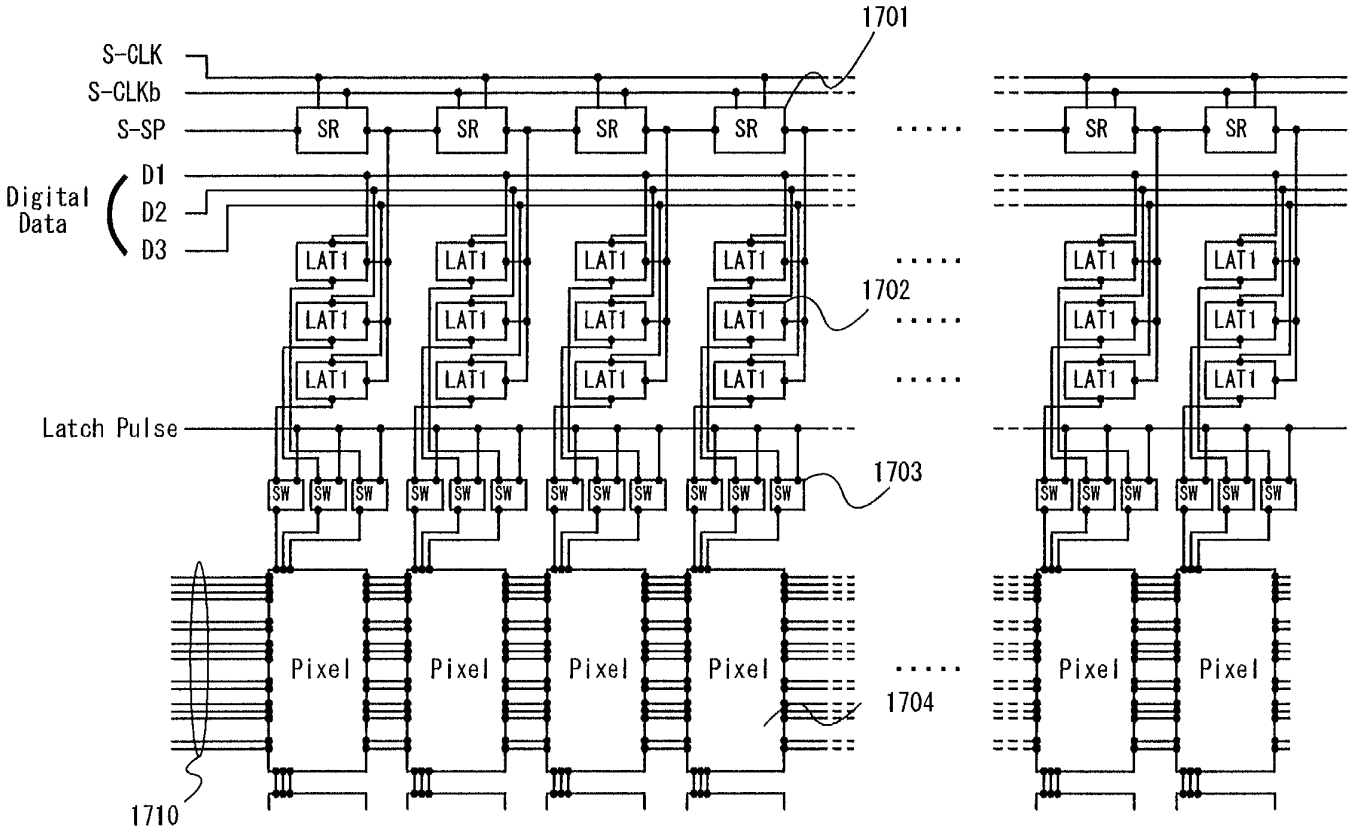

1701
S-CLK
S-CLKb
S-SP
Digital Data
D1
D2
D3
SR
LAT1
1702
Latch Pulse
SW
1703
Pixel
1704
1710

FIG. 17

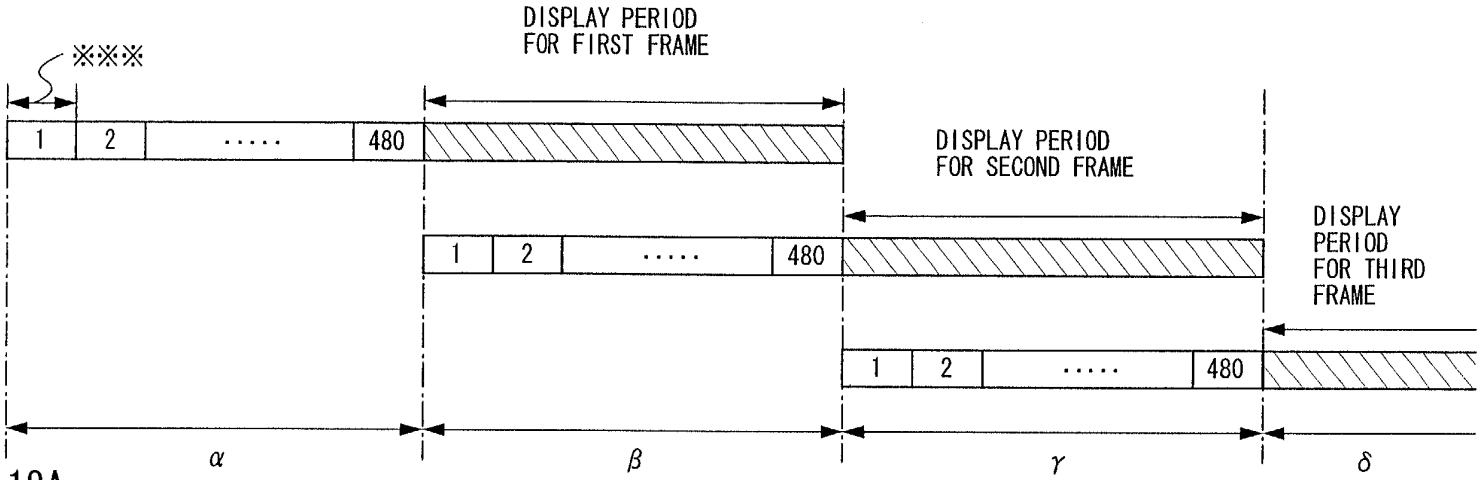


FIG. 18A

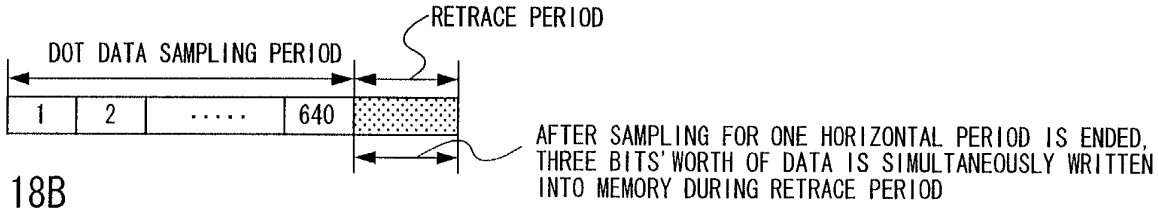


FIG. 18B

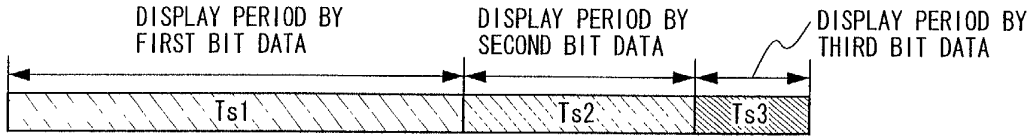


FIG. 18C

FIG. 19A

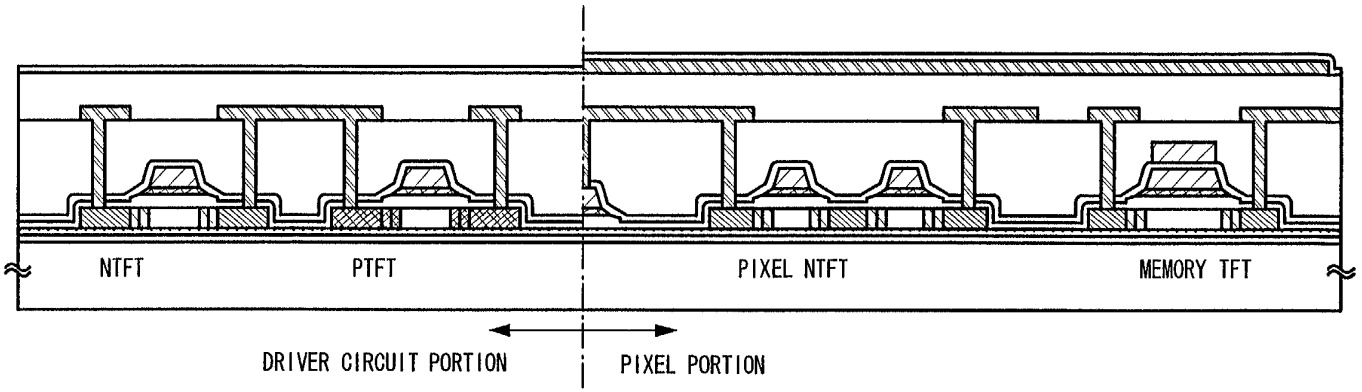
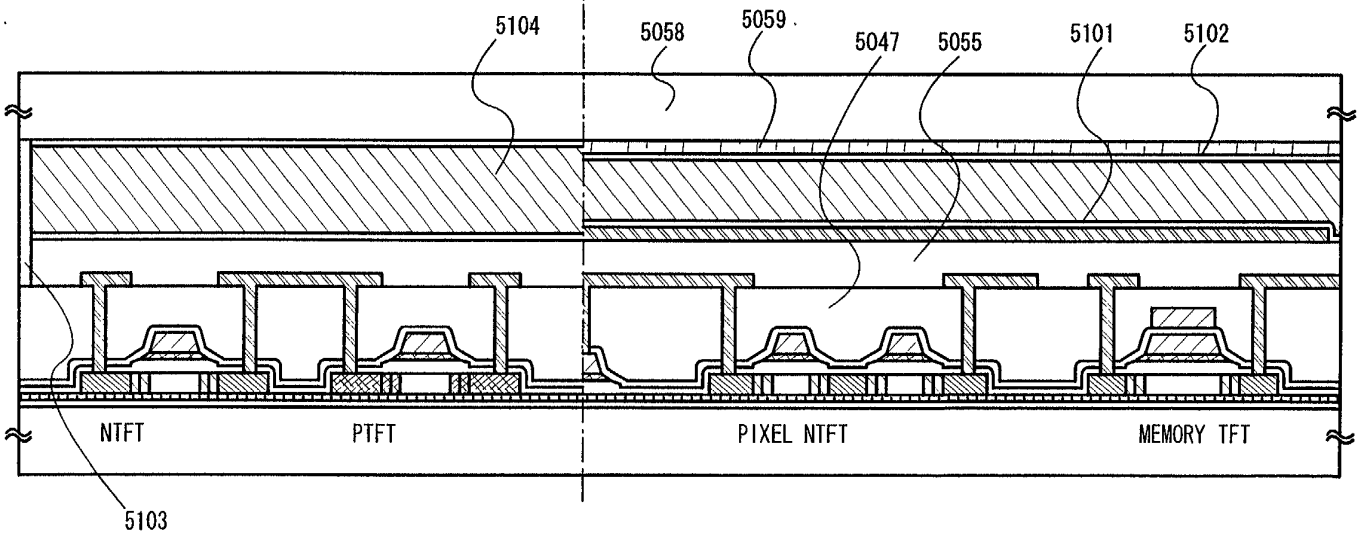


FIG. 19B



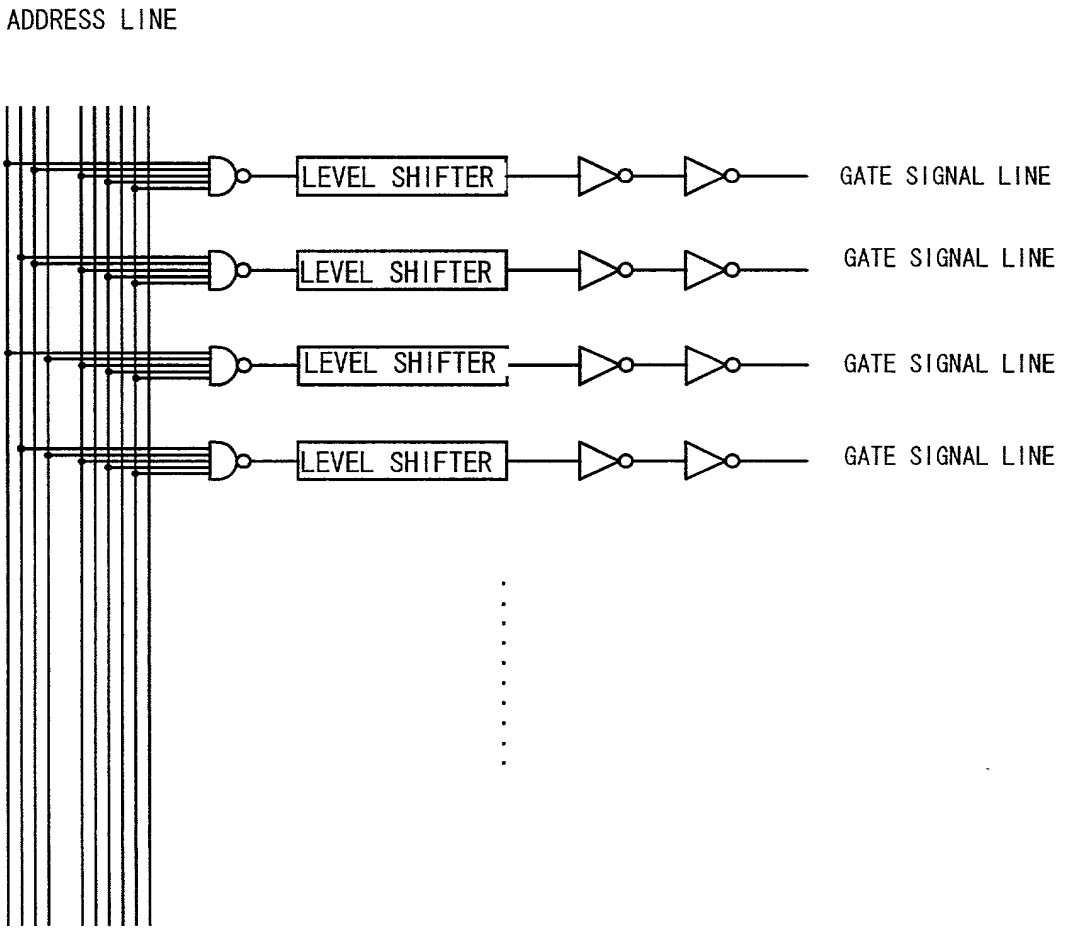

ADDRESS LINE
LEVEL SHIFTER
LEVEL SHIFTER
LEVEL SHIFTER
LEVEL SHIFTER
GATE SIGNAL LINE
GATE SIGNAL LINE
GATE SIGNAL LINE
GATE SIGNAL LINE

FIG. 20

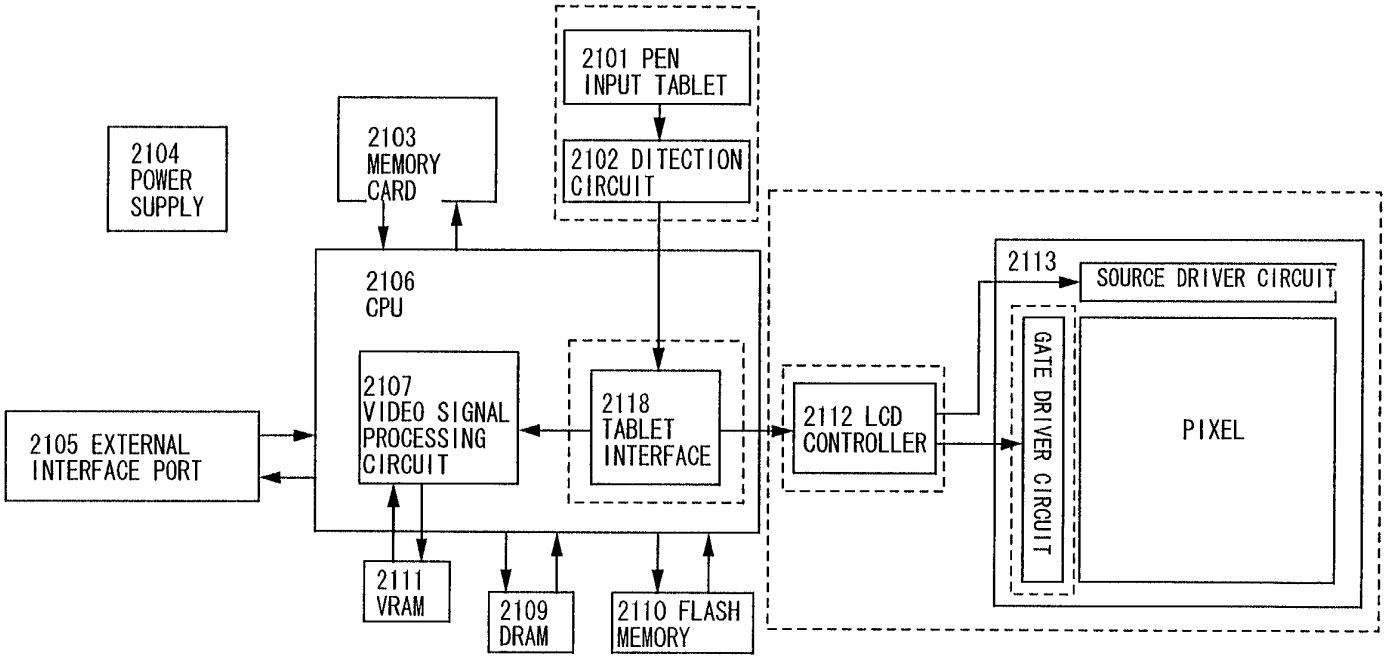

2101 PEN INPUT TABLET
2102 DITECTION CIRCUIT
2103 MEMORY CARD
2104 POWER SUPPLY
2106 CPU
2107 VIDEO SIGNAL PROCESSING CIRCUIT
2118 TABLET INTERFACE
2105 EXTERNAL INTERFACE PORT
2112 LCD CONTROLLER
2113
SOURCE DRIVER CIRCUIT
GATE DRIVER CIRCUIT
PIXEL
2111 VRAM
2109 DRAM
2110 FLASH MEMORY

FIG. 21

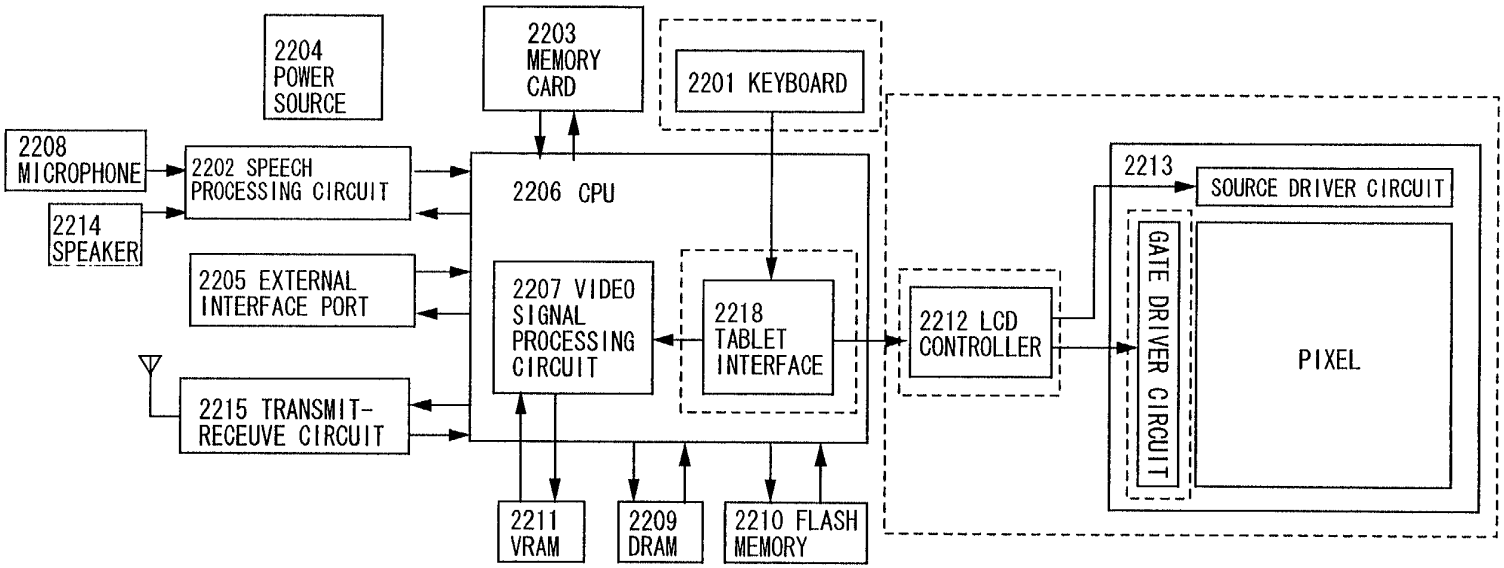

2204
POWER
SOURCE
2203
MEMORY
CARD
2201 KEYBOARD
2208
MICROPHONE
2202 SPEECH
PROCESSING CIRCUIT
2214
SPEAKER
2206 CPU
2205 EXTERNAL
INTERFACE PORT
2207 VIDEO
SIGNAL
PROCESSING
CIRCUIT
2218
TABLET
INTERFACE
2212 LCD
CONTROLLER
2213
SOURCE DRIVER CIRCUIT
GATE DRIVER CIRCUIT
PIXEL
2215 TRANSMIT-
RECEUVE CIRCUIT
2211
VRAM
2209
DRAM
2210 FLASH
MEMORY

FIG. 22

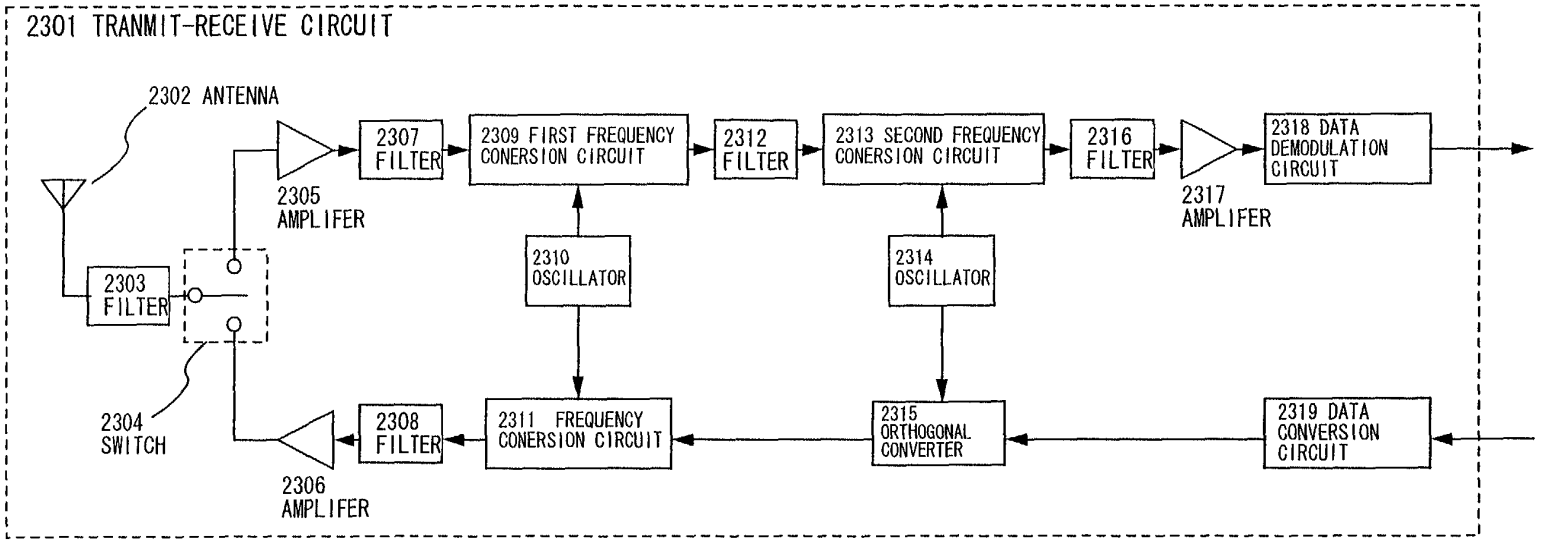

2301 TRANMIT-RECEIVE CIRCUIT
2302 ANTENNA
2303 FILTER
2304 SWITCH
2305 AMPLIFER
2306 AMPLIFER
2307 FILTER
2308 FILTER
2309 FIRST FREQUENCY CONERSION CIRCUIT
2310 OSCILLATOR
2311 FREQUENCY CONERSION CIRCUIT
2312 FILTER
2313 SECOND FREQUENCY CONERSION CIRCUIT
2314 OSCILLATOR
2315 ORTHOGONAL CONVERTER
2316 FILTER
2317 AMPLIFER
2318 DATA DEMODULATION CIRCUIT
2319 DATA CONVERSION CIRCUIT

FIG. 23